

## Expandable Computer Board with Dual Shield Housing Solutions

### Abstract:

A compact computer system board 10 comprises dual shield expansion zones 11, 12, expansion connectors 113, 123 which can be connected to expansion boards. Once a expansion board is connected to the expansion connector 113 (123) in the shield expansion zone 11 (12) to extent the application of the system 10, the shield metal housing cover 20 will be mounted above the shield expansion zone 11(12). The shield expansion house formed by shield expansion zone 11(12) and shield metal housing cover 20 isolates the electromagnetic interference between expansion board and the outside surrounding. The shield metal housing cover 20 as well as the shield expansion zone 11 (12) is the heat sink of the expansion board inside. The shield expansion housing solutions guarantee the system processing high reliability and stably in the limited space of the system board. Dual expansion housing solutions especially eliminate the cross interference with high heat sink ability under the situation when there are two radio frequency application expansion boards installed on to the system board.